To: Sayles, Gregory[Sayles.Gregory@epa.gov]; Jennifer Orme-Zavaleta[Orme-Zavaleta.Jennifer@epa.gov]
From: Kavlock, Robert
Sent: Fri 8/14/2015 6:48:16 PM
Subject: RE: remote sensing response to Gold King Mine spill into the Animas River

JOZ?

From: Sayles, Gregory
Sent: Friday, August 14, 2015 2:36 PM
To: Kavlock, Robert
Subject: Re: remote sensing response to Gold King Mine spill into the Animas River

I available.

Gregory Sayles

EPA's Homeland Security Research

513-569-7607 desk-513-305-9984 cell

On Aug 14, 2015, at 2:26 PM, Kavlock, Robert <Kavlock.Robert@epa.gov> wrote:

> You around to talk?

> **From:** Orme-Zavaleta, Jennifer
> **Sent:** Friday, August 14, 2015 2:08 PM
> **To:** Sayles, Gregory; Kavlock, Robert
> **Subject:** FW: remote sensing response to Gold King Mine spill into the Animas River
> **Importance:** High

> See below and let me know what you think

> Sent from my Windows Phone

From: Neale, Anne
Sent: 8/14/2015 14:01
To: Orme-Zavaleta, Jennifer; McDonald, Michael E.
Subject: FW: remote sensing response to Gold King Mine spill into the Animas River

Hi Jennifer and Mike,

You may already have spoken to Blake or others but Taylor brings up a really great point about remote sensing capabilities.

Annie

Anne Neale

EnviroAtlas Project Lead

US EPA, RTP, NC

919-541-3832

From: Jarnagin, Taylor
Sent: Friday, August 14, 2015 1:42 PM
To: Neale, Anne
Subject: remote sensing response to Gold King Mine spill into the Animas River
Importance: High

Hi Annie,

I think this is an excellent candidate for the use of remote sensing with a multispectral or hyperspectral sensor to identify and map the sediments from the Gold King Mine spill into the Animas River.

Our local talent includes: Blake Schaeffer and Drew Pilant (both of whom could analyze imagery) and David J. Williams (who is working on putting together a sensor just for this type of occasion, unfortunately, I don't think that sensor has been fully tested and is operation right now). The Environmental Photographic Interpretation Center existed for exactly this sort of emergency response capability and to act as a liaison between the contractors who would fly and analyze the imagery and the Regions who had the boots on the ground and were directly responsible for the clean-up.

Our current contact for the capability to do this is:

H. Craig Seaver

Remote Sensing Manager

EPA National Computer Center

Office of Technology Operations and Planning

Office of Environmental Information

Phone: (919) 541-4436

Email: seaver.craig@epa.gov

Taylor

S. Taylor Jarnagin, Ph.D.

Research Ecologist

EPA Landscape Ecology Branch

Environmental Sciences Division

USEPA/ORD National Exposure Research Laboratory

Mail Drop D343-05

109 T.W. Alexander Drive

Research Triangle Park, NC 27711

E-mail: jarnagin.taylor@epa.gov

Work Office Telephone (M-W-F): 919-541-1987

Work Office (D321) Fax (M-W-F): 919-541-0715

Web Site:

< http://www.epa.gov/nerlesd1/land-sci/staff/jarnagin.htm >

Main Research Project:

"Collaborative Research: Streamflow, Urban Riparian Zones, BMPs, and Impervious Surfaces":

< http://www.epa.gov/nerlesd1/land-sci/clarksburg01-05.htm >